ARI Contractor Report 97-10

Modifying the Computerized Testing System

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14. ABSTRACT (Maximum 200 words):

The following changes were made to the existing Computerized Testing system: a) Modified to use a computer mouse and joystick input devices. The calibration procedures and instruction screens were modified to function correctly with these new devices, b) The One-Hand Tracking test was added to the battery, and c) Program modified to recycle to a new examinee at the conclusion of testing. Changes to the source code were documented.

15. SUBJECT TERMS

Computerized testing; Psychomotor Test; Computer Calibration

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Final Report: Modifying the Computerized Testing System

1. **Purpose**: The objective of the work to be performed is to enhance the existing Computerized Testing System to be capable of receiving input from a computer mouse and joystick. As a result of adding these two devices to the list of potential input devices, it will be necessary to modify peripheral code including calibration procedures and instruction screens.

2. Technical Objectives Met:

- a. Given the cost of each response pedestal with the required interface card is nearly \$1100, it is more cost effective and simple to adapt the existing test to a computer mouse and joystick input device. This was accomplished; the testing system now operates with a mouse or a joystick device. Calibration procedures and instruction screens were modified as needed.
 - b. Added the One-Hand Tracking test to the battery.
- c. Finally, the battery was modified to prompt for a new examinee once an examinee has finished testing. This eliminated the need to re-execute the program for each examinee.
 - d. Provided documentation on changes to the program source code.
- 3. Summary: All objectives were met.